brought to light and properly cared for. In the prevention and treatment of rheumatic fever and its complications controlled rest played an all important part. Researches at the Rockefeller Institute demonstrated that patients with rheumatic fever should spend two to three months in bed in the hospital with absolute rest in all early cases. The salicylates undoubtedly are the most important drugs we possess in the way of medicinal treatment. Sore throat is often an early manifestation of rheumatic infection and the tonsils would appear to be portals of entry for the infective agent. Professor Graham considers tonsillectomy as of value where there is any evidence of septic infection. When there is a history of recurring attacks of tonsillitis the tonsils should be removed but he considers it better to wait until the disease is under control before removing them as there is danger from nephritis arising from infective embolism.

In the succeeding series of lectures Dr. Grant discussed "Injury to the shoulder joint," Professor Hendry spoke on "Aids to labour," and Professor Graham took up the question of "Diseases of the upper mediastinum."

G. E. LEARMONTH

## STRUCTURE OF NEURONE JUNCTIONS

Two papers are contributed to the Australian *Journal of Experimental Biology and Medical Science*, June, 1926, by O. W. Tiegs. Tiegs disputes the adequacy of the commonly accepted conception of the neurone, maintaining that it does not explain certain features of the behaviour of the central nervous system which are explicable, if we assume the existence of numerous conducting paths within individual neurones. He declares that his investigations show that, so far as the microscope can reveal, the mode of termination of neurones on all the spinal cord cells is the same, and no such thing as a ramifying, discontinuous synapse exists. His conclusions are that the fine collaterals that enter the gray matter from the white matter of the spinal cord converge upon and penetrate the dendrites of the nerve cells of the gray matter, and are continuous with and undistinguishable from the neurofibrils of the nerve cells; that on entering a nerve cell they pass independently of one another, as the neurofibrils, toward the middle of the cell, where they anastomose; from this anastomosing system a small number of neurofibrils arise which emerge through the axone; the anastomosing system appears to be the seat of the nervous integration, with the component phenomena of summation, inhibition, fatigue, delay, one-directional conduction, etc. It will be noted that this differs from the conceptions of neurone continuity advanced by Gerlach, Golgi and Nansen, and Bethe. Tiegs considers that dendrites are relatively short structures, and that the greater portion of the enormous "dendrites" made apparent by the Golgi method are bundles of neurofibrillæ whose real nature is obscured through a defect in the method of staining.

W. H. HATTIE

## A DOCTOR'S SIGNBOARD

*To the Editor:*

Sir,—I send you a photograph of an early 17th century doctor's signboard, which is preserved at the Royal College of Surgeons. It formerly belonged to the late Mr. Manley


THE SURGEON AND THE SEVEN SURGICAL OPERATIONS

Sims, F.R.C.S., and was brought to London from Poole, where, presumably, it had been in use. In the centre of the panel, which is of wood, painted, stands the doctor himself, surrounded by the seven surgical operations: Left—bleeding, amputation, dentistry; Centre —examination of urine; Right—reduction of